



UniGene

ORGANIZED VIEW OF THE TRANSCRIPTOME

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 UGID:675343 UniGene Hs.460184 *Homo sapiens* (human) MCM4

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Minichromosome maintenance complex component 4 (MCM4)

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SELECTED PROTEIN SIMILARITIES

Comparison of sequences in UniGene with selected protein reference sequences. The alignments can suggest function of a gene.

| | Reference Protein | Species | Id (%) | Len (aa) |
|--------------------------------|--|------------------------|--------|----------|
| XP_528129.2 | PREDICTED: minichromosome maintenance protein 4 | <i>P. troglodytes</i> | 100.0 | 862 |
| NP_877423.1 | minichromosome maintenance complex component 4 | <i>H. sapiens</i> | 100.0 | 862 |
| NP_032591.2 | minichromosome maintenance complex component 4 | <i>M. musculus</i> | 98.1 | 861 |
| NP_001081448.1 | cdc21 protein | <i>X. laevis</i> | 92.8 | 862 |
| NP_944595.1 | MCM4 minichromosome maintenance deficient 4, mitotin | <i>D. rerio</i> | 88.9 | 749 |
| NP_477185.1 | disc proliferation abnormal CG1616-PA | <i>D. melanogaster</i> | 76.1 | 865 |
| NP_490962.1 | yeast MCM (licensing factor) related family member (mcm-4) | <i>C. elegans</i> | 69.0 | 815 |
| XP_001700810.1 | minichromosome maintenance protein 4 | <i>C. reinhardtii</i> | 62.5 | 543 |
| NP_179236.3 | DNA replication licensing factor, putative | <i>A. thaliana</i> | 59.6 | 844 |
| NP_015344.1 | Essential helicase component of heterohexameric MCM2-7 complexes which bind pre-replication complexes on DNA and melt the DNA prior to replication; accumulates in the nucleus in G1; homolog of <i>S. pombe</i> Cdc21p; Mcm4p | <i>S. cerevisiae</i> | 57.4 | 932 |
| XP_331738.1 | hypothetical protein | <i>N. crassa</i> | 57.2 | 995 |

GENE EXPRESSION

Tissues and development stages from this gene's sequences survey gene expression. Links to other NCBI expression resources.

Expression Profile: [View expression levels using UniGene's EST ProfileViewer](#)

[[Show more entries with profiles like this](#)]

Note: Highly represented (9.1 pct) in cDNA library dbEST:3374, HT0268.

GEO profiles: [Gene expression profiles in the NCBI Gene Expression Omnibus database](#)

cDNA Sources: testis; brain; embryonic tissue; mixed; mouth; skin; lymph node; intestine; uncharacterized tissue; placenta; ovary; kidney; uterus; cervix; stomach; epididymis; pancreas; heart; salivary gland; bladder; thyroid; spleen; trachea; tonsil; ascites; lymph; lung; thymus; liver; mammary gland; eye; bone marrow; connective tissue; esophagus;

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9a

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prostate; blood; adrenal gland; bone; muscle; vascular;
larynx; amniotic fluid

MAPPING POSITION

Genomic location specified by transcript mapping, radiation hybrid mapping, genetic mapping or cytogenetic mapping.

| | | |
|---------------|--------|-------------------|
| Chromosome: | 8 | |
| Map position: | 8q11.2 | |
| UniSTS entry: | Chr 8 | <u>RH80868</u> |
| UniSTS entry: | Chr 8 | <u>SHGC-35380</u> |
| UniSTS entry: | | <u>MCM4</u> |
| UniSTS entry: | | <u>RH102573</u> |
| UniSTS entry: | | <u>G35510</u> |
| UniSTS entry: | Chr 8 | <u>STS-N27515</u> |

SEQUENCES

Sequences representing this gene; mRNAs, ESTs, and gene predictions supported by transcribed sequences.

mRNA sequences (9)

| | | |
|--------------------|--|-----------|
| <u>NM_005914.2</u> | Homo sapiens minichromosome maintenance complex component 4 (MCM4), transcript variant 1, mRNA | P |
| <u>NM_182746.1</u> | Homo sapiens minichromosome maintenance complex component 4 (MCM4), transcript variant 2, mRNA | P |
| <u>CR606514.1</u> | full-length cDNA clone CS0DK011YN01 of HeLa cells Cot 25-normalized of Homo sapiens (human) | P |
| <u>CR598188.1</u> | full-length cDNA clone CS0DJ012Y118 of T cells (Jurkat cell line) Cot 10-normalized of Homo sapiens (human) | P |
| <u>AK022899.1</u> | Homo sapiens cDNA FLJ12837 fis, clone NT2RP2003228, highly similar to H.sapiens P1-Cdc21 mRNA | P |
| <u>AM493756.1</u> | Homo sapiens partial mRNA for minichromosome maintenance protein 4 (MCM4 gene) isolated from bone marrow | P |
| <u>X74794.1</u> | H.sapiens P1-Cdc21 mRNA | PA |
| <u>AK309812.1</u> | Homo sapiens cDNA, FLJ99853 | P |
| <u>BC031061.1</u> | Homo sapiens minichromosome maintenance complex component 4, mRNA (cDNA clone MGC:33310 IMAGE:5273457), complete cds | PA |

EST sequences (10 of 812) [Show all sequences]

| | | | |
|-------------------|---------------------|------------------|------------------|
| <u>AA978201.1</u> | Clone IMAGE:1578660 | mixed | 3' read P |
| <u>AA992118.1</u> | Clone IMAGE:1622043 | embryonic tissue | 3' read P |
| <u>AA992744.1</u> | Clone IMAGE:1623457 | embryonic tissue | 3' read P |

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| | | | |
|------------|---------------------|------------------|------------------|
| AI004065.1 | Clone IMAGE:1619903 | testis | 3' read P |
| AA921783.1 | Clone IMAGE:1543478 | mixed | 3' read P |
| AI039224.1 | Clone IMAGE:1658029 | embryonic tissue | 3' read A |
| AI039402.1 | Clone IMAGE:1658818 | embryonic tissue | 3' read P |
| AI050010.1 | Clone IMAGE:1699394 | kidney | 3' read A |
| AI073482.1 | Clone IMAGE:1640256 | testis | 3' read P |
| R20801.1 | Clone IMAGE:130112 | placenta | 3' read P |

[Download Sequences](#)

Key to Symbols

P Has similarity to known **Pro**teins (after translation)
A Contains a poly-**A**denylation signal
S Sequence is a **S**uboptimal member of this cluster
M Clone is putatively CDS-complete by **MGC** criteria


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